

Claims 5-24 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 5, 7, 9-21, 23 & 24 stand rejected under 35 U.S.C. §102(e) as being anticipated by DeLuca et al., U.S. Pat. No. 4,835,777.

Claims 6 & 8 are rejected under 35 U.S.C. §103(a) as being unpatentable over DeLuca et al., U.S. Pat. No. 4,835,777.

Claim 22 was not rejected over prior art and is assumed to be allowable if incorporated into independent form.

Applicants believe new claims 25-34 present no new matter and are patentable over the prior art of record.

All pending claims 5-24 are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting over the claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414; and copending U.S. application 08/113,329 and related U.S. applications numbered 1-327 in the Office Action, Paper No. 10 (p. 13-15) , mailed on December 11, 1996.

Claims 5-34, some of which have been amended, remain active in this application. In accordance with the foregoing, the claims have been amended to improve clarity, and further, to respond to certain rejections made by the Examiner arising under 35 U.S.C. § 112. The Examiner's comments on the claims are acknowledged and appreciated. No new matter is presented in the foregoing amendments. Approval and entry of same is respectfully requested.

Regarding paragraph 2 of the Office Action, Applicants respectfully point out that the Information Disclosure Statements filed for the subject application claim priority back to the application filed November 3, 1981, and issued as U.S. Pat. No. 4,694,490 on September 15, 1987. The present application claims priority under 35 U.S.C. § 120 of the following applications:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Patent No.</u>
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825

As to the paragraph numbered 3, Applicants acknowledge their duty to maintain a line of patentable demarcation between related applications. Assuming *arguendo* that substantially duplicate claims exist, the Applicants intend to make a good faith effort to alert the PTO of any instances in which the PTO treats such claims inconsistently.

As to the paragraph numbered 4, Applicants acknowledge and appreciate the Examiner's concern over the use of alternative claim language. Applicants believe that the disclosure supports every possible embodiment or permutation that can be created using said language. During the prosecution of this application, Applicants intend to ensure that the disclosure supports each possible embodiment as claimed using alternative claims.

As to paragraphs 5 through 13 of the Office Action, Applicants' views are fully discussed in Applicants' reply brief to the rejections in application number 08/113,329, hereby incorporated by reference. Applicants will not repeat portions the response which are identical in this application. Applicants will discuss those portions of the double patenting rejection that are specific to the present application *infra*.

Paragraph 11 of the Office Action states that "determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time." (Office Action, p. 16 at lines 1-5). Applicants submit that the Examiner and the PTO cannot defer further rejections to a later time. Every ground of rejection should be made in Examiner's first Office Action. Title 37 of the CFR states that "[o]n taking up an application for examination . . . the

Examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated.” 37 CFR § 1.104(a). The MPEP states “[t]he Examiner’s action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the Examiner may be limited to such matters before action is made.” MPEP § 707.07, quoting 37 CFR § 1.105. Finally, “[p]iecemeal examination should be avoided as much as possible. The Examiner ordinarily should reject each claim on all valid grounds available . . . Where a major technical rejection is proper, it should be stated with full development of reasons rather than by mere conclusion coupled with some stereotyped expression.” MPEP §707.07(g). Applicants submit that the Examiner has a duty to give each application a complete examination, that rejections be made with specificity, and that deferred rejections are not allowed. For these reasons, Applicants likewise traverse the rejection based on the “judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and the following [list of all Applicants’ copending applications].” Applicants submit that this rejection, even if appropriately made with specificity, should be a provisional double patenting rejection. Applicants respectfully request that this rejection be withdrawn.

As to paragraph 12, related to the multiplicity rejection in parent file 07/113,329, Applicants submit that the PTO gave a multiplicity rejection in this case and limited Applicants to twenty-five claims. Roughly one hundred claims had been originally filed. There was no substantive review of any of the other claims outside of the twenty five. Applicants were not permitted to submit additional claims although a request was made. The disclosure of Applicants address too many subject areas to be adequately

covered by a small number of claims. Applicants submit that "nexus" analysis is not required by Applicants.

As to the Office Action's (par. 14 & 15) rejection of various of the pending claims and objections to the specification under 35 U.S.C. § 112 and related sections of the CFR and MPEP, Applicants have amended the pending claims to further the Examiner's understanding of the claimed subject matter. Applicants, where requested and where necessary, have provided citations to the specification to demonstrate enablement. Applicants submit that the claims, as amended, are distinct as well as properly described and fully enabled by the priority disclosure. Applicants will provide detailed remarks on the Examiner's specific objections and queries *infra*.

As to the paragraph 21, Applicants acknowledge and appreciate the interviews provided by the PTO. Applicants also appreciate the detailed description of the interviews provided in the Office Action. The Office Action states that "the Group would like to have a complete grouping of applications in a manner that was submitted earlier for only a portion of the total filings." Applicants note that based on the Office Actions received thus far, the PTO does not appear to be following the groupings Applicants submitted previously. The order of examination of Applicants' applications do not seem to have any correspondence to the groupings previously submitted. Applicants, therefore, will not supply further groupings. Applicants will, however, gladly supply further groupings if requested by the PTO for the purpose of following these groupings. Mr. Groody has confirmed in a telephone conversation between Mr. Groody and Mr. Scott that no more groupings need be sent.

In the interest of maintaining a clear record, Applicants respectfully traverse the Office Action's interview summary statement that an offer was made to terminally disclaim the present application with the '81 or '87 patents. Rather, Applicants respectfully submit that their offer was to disclaim a block of copending applications

against one another, provided their issue date was in close enough proximity so as not to result in unnecessarily great losses in patent term duration.

B. Response to Rejections under 35 U.S.C. §112

1. Synopsis of the Specification

Applicants shall provide a summary of the pertinent disclosure including citation to examples supporting the claimed subject matter. The present application claims priority based on the 1987 disclosure, filed on September 11, 1987, as Ser. No. 07/096,096, and issued October 23, 1990, as U.S. Pat. No. 4,965, 825.

In their 1987 continuation-in-part specification, Applicants disclose "an integrated system of programming communication" which encompasses many inventions and deliberately includes many embodiments. Their teaching technique is to introduce the principles of their integrated system in a series of *related* examples. Each example builds upon structure and principles introduced earlier. Examining basic principles in detail in early examples, enables the specification with concreteness to expand and extend the scope of the teaching in later examples.

Starting with "**One Combined Medium**" on page 19 which focuses on the creation and delivery of a receiver specific graph in a broadcast or cablecast television program, "Wall Street Week," the specification introduces concepts of personalization of mass media and broadcast control of receiver station computing equipment. At page 28 *et seq.* it describes apparatus that include signal processors and signal decoders and introduces the concept of a signal processor *system*. At page 40 *et seq.* it teaches the composition of signal information and the organization of message streams.

Then in a series of four **examples, #1 through #4** which begin on pages 108, 143, 162, and 197 respectively, the specification demonstrates how receiver stations communicate signal processor apparatus and methods ("*SPAM*") processor code and data of the integrated system of programming communication to *some* apparatus they

actuate, how decryption occurs, how metering and monitoring take place, and how actuated apparatus perform. Each example builds on concepts introduced earlier in the specification to provide a detailed teaching of its own subject matter, and a particularly important teaching occurs from pages 156 through 162 where the specification teaches the structure and operating capabilities of a *controller of a decoder*.

Building on all that precedes it, **example #5**, which begins on page 248, then relates how the integrated system processes a multichannel communications system, which conveys different types of signals, in order to monitor programming availability and enable receiver station apparatus to receive desired programming.

From pages 278 through 312, in **example #6** and especially **example #7**, which includes both digital and analog television signals and relates to the "Wall Street Week" program (and which has further disclosure at pages 427 through 447), the specification teaches regulating reception and use of programming of the integrated system of programming communication.

At page 312 *et seq.* it relates further monitoring concepts.

From page 324 through page 390 the specification teaches a series of transmitter station and transmitter network concepts. This portion of the specification also relies on all previous disclosure in that special attention is given to intermediate transmission stations which, *as receiver stations*, respond to programming transmissions of the integrated system as well as storing, organizing, generating, and transmitting programming. At page 340 *et seq.* **example #8** teaches distribution to, storage and organization at, and retransmission from intermediate transmission stations ("*ITS*") of SPAM programming -- most specifically television spot commercials. At page 354 *et seq.* **example #9** teaches automating intermediate transmission station combined medium operations by describing how an intermediate transmission station responds to an intermediate generation set and other elements of the integrated system to generate processor code and data and transmit the code and data with SPAM programming --

spot commercial unit Q of example #8 -- all of which are subsequently shown in the specification to operate at receiver stations to deliver receiver specific programming at video monitors, speakers, printers, and transmitters (telephones which communicate to remote data collection stations). At page 374 *et seq.* **example #10** extends the transmitter and network automating concepts of examples #8 and #9 by disclosing *a plurality* of intermediate transmission stations generating processor code and data, in the fashion of example #9, and inserting different code and data into a *network originated* transmission of SPAM programming -- again the unit Q television spot commercial.

From page 390 through 516, the specification discloses further ultimate receiver station ("URS") automation concepts, including regulating the URS environment (page 396 *et seq.*), controlling multiple receivers and output devices to present coordinated output (page 406 *et seq.*), receiving selected programming of the integrated system (page 419 *et seq.*), certain *integrated system computer system concepts* (page 427 *et seq.*), whose **example #7** (page 427 *et seq.*) description relies on the receiving selected programming concepts of pages 419-427. At page 447 *et seq.* the specification discloses certain data maintenance, timing control, efficiency, and other concepts involved in controlling combined media operations. At page 457 *et seq.* the specification discloses certain timing, imaging, communication, and transmission processing concepts that relate to efficient delivery of integrated system programming. At page 463 *et seq.* the specification relates to user specific audio, print, and other combined media besides receiver specific video.

With all this preparation, the specification teaches, from page 469 through page 516, the combined media presentation of **examples #9 and #10** at a plurality of ultimate receiver stations (which are responding to signals sent by different intermediate transmission stations).

At page 516 *et seq.* the specification discloses enhancing and extending functionality of the integrated system by reprogramming receiver apparatus and enabling receiver stations to process transmissions having new forms of composition.

Finally, at page 533 *et seq.* the specification discloses "**Summary Example**" (#11) which teaches a very large scale integrated data processing and communications problem and its solution(s), using *all of* the disclosed integrated system with iterative broadcasting, response, and refinement.

Because of the integrated nature of the disclosure, no part of the specification is intended to be considered *in isolation*. However, with regard to the present application, the invention is disclosed, among other places, as follows below.

Claims 5, 25, 26-30 & 34, are disclosed at page 94, lines 5-9; page 106, lines 28-36; page 107, lines 9-13 and 28-33; page 122, lines 34 to page 123, line 15; page 123, line 16 to page 125, line 9; page 156, line 34 to page 157, line 10; page 160, lines 19-20; page 452, line 24 to page 457, line 10; and page 514, line 32 to line 516, line 13.

Claims 23 & 24, are disclosed at page 94, lines 5-9; page 106, lines 28-36; page 107, lines 9-13 and 28-33; page 122, lines 34 to page 123, line 15; page 123, line 16 to page 125, line 9; page 156, line 34 to page 157, line 10; page 160, lines 19-20; page 452, line 24 to page 457, line 10; page 514, line 32 to line 516, line 13; and pp. 324-390.

Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter. Applicants will provide additional specification support in their detailed response to the Examiner's specific rejections provided *infra*.

2. Remarks and Argument in Response to Examiner's Objections

Applicants have amended the pending claims in response to various of the Examiner's objections and queries. Applicants believe that all pending claims clearly define the metes and bounds of the claimed subject matter, and are supported by an adequate written description that is fully enabling. Applicants will address each paragraph of the Office Action regarding rejections and objections under 35 U.S.C. § 112 and related sections of the CFR and MPEP below.

Applicants respectfully submit that amended claims 5-8, 11, 13, 15-24 of the subject application particularly point out and claim the subject matter sufficiently for one of ordinary skill in the art to comprehend the bounds of the claimed invention. The test for definiteness of a claim is whether one skilled in the art would understand the bounds of the patent claim when read in light of the specification, and if the claims so read reasonably apprise those skilled in the art of the scope of the invention, no more is required. Credle v. Bond, 25 F.3d 1556, 30 U.S.P.Q.2d 1911 (Fed. Cir. 1994). The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope. In re Warmerdam, 33 F.3d 1354, 31 U.S.P.Q.2d 1754 (Fed. Cir. 1994). Applicants have amended the pending claims to enhance clarity and respectfully submit that said claims are fully enabled by the specification and distinctly indicate the metes and bounds of the claimed subject matter. Applicants will address the Examiner's particular objections and questions *infra*.

Claims 11, 14 & 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The following changes have been made to the claim language to overcome this rejection.

With respect to claim 11, it is questioned where in the disclosure there is support for the term "history-of-efficiency information," and "performing one of the functions

of instituting and restoring functionality of said at least one processor based on said stored history of efficiency information,” as cited in claim 11 of the instant application. “History-of-efficiency information” can be found in the specification at pp. 454-456; specifically at page 455, line 2.

With respect to claim 14, “said step of performing primary error correction” has antecedent basis with respect to the language in claim 5, comprising the step of “performing a primary error correction,” (line 6).

With respect to claim 19, “some of a combined medium program,” has been changed to -- a combined medium program --.

Applicants’ believe that the above recited changes are sufficient to overcome the rejections under 35 U.S.C. § 112, second paragraph, and respectfully request withdrawal of these rejections. Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter.

C. Response to Rejection of Claims for Absence of Novelty

1. 35 U.S.C. §102(e) Rejection over DeLuca et al., U.S. Pat. No. 4,835,777.

Claims 5, 7, 9-21, 23 & 24 are rejected under 35 U.S.C. §102(e) as being anticipated by DeLuca et al., U.S. Pat. No. 4,835,777.

DeLuca et al. teaches a digital paging receiver which includes apparatus for determining if an incoming page message is a duplicate of a prior page message already stored in the memory of the receiver. If the current page message is determined to be a duplicate of such prior page, errors which are contained in the prior page are replaced with data from such duplicate page to reduce or eliminate errors in the stored page.

With respect to Applicants' amended claim 5, DeLuca et al. fails to teach, *inter alia*, receiving an information transmission containing processor instructions and a program; and programming said receiver station to perform a predetermined secondary error correction routine in accordance with said processor instructions. DeLuca et al. merely teaches a pager which receives a digital paging message to be stored in the pager memory for subsequent processing and display to the user. Nowhere does DeLuca et al. teach or suggest the receipt of processor instructions at a receiver station which program the receiver station (DeLuca et al.'s pager unit) to perform an error correction routine in accordance with the processor instructions.

Applicants' respectfully submit that the cited art does not anticipate claim 5 since the reference fails to disclose every element of the claimed invention, and Applicants respectfully request that the 35 U.S.C. §102(e) rejection of claim 5 be withdrawn.

Claims 6-22 depend upon independent claim 5. As discussed *supra*, DeLuca et al. fails to disclose every element of claim 5 and thus, *ipso facto*, DeLuca et al. fails to anticipate dependent claims 6-22, and therefore, the rejections of claims 6-21 should be withdrawn and the claims be permitted to issue.

With respect to Applicants' amended claim 23, DeLuca et al. fails to teach, *inter alia*, transmitting said information transmission containing a program and processor instructions, wherein said processor instructions program said receiver station to perform a predetermined secondary error correction routine in accordance with said processor instructions. DeLuca et al. merely teaches a pager which receives a digital paging message to be stored in the pager memory for subsequent processing and display to the user. Nowhere does DeLuca et al. teach or suggest the receipt of processor instructions at a receiver station which program the receiver station (DeLuca et al.'s pager unit) to perform an error correction routine in accordance with the processor instructions.

Applicants' respectfully submit that the cited art does not anticipate claim 23 since the reference fails to disclose every element of the claimed invention, and Applicants respectfully request that the 35 U.S.C. §102(e) rejection of claim 23 be withdrawn.

With respect to Applicants' amended claim 24, DeLuca et al. fails to teach, *inter alia*, receiving an instruct signal,¹ receiving a transmitter control signal which operates at said transmitter station to communicate said program to a transmitter; and transmitting said instruct signal and said transmitter control signal. DeLuca et al. merely teaches the reception of an information transmission, (column 1, lines 10-27), on multi-address pagers comprising multiple addresses or source numbers from which a paging terminal can call to reach the pager, (column 1, line 63 to column 2, line 1). Nowhere does DeLuca et al. teach or suggest receiving anything other than an information transmission comprising a paging message, and fails to teach or suggest receiving an instruct signal which effects one of a transmission station and a receiver station to generate a program, receiving a transmitter control signal which operates at said transmitter station to communicate said program to a transmitter; and transmitting said instruct signal and said transmitter control signal.

Applicants' respectfully submit that the cited art does not anticipate claim 24 since the reference fails to disclose every element of the claimed invention, and

¹ which one of:

(a) effects a transmission station to generate a program, said receiver station to perform a primary error correction routine by processing at least a portion of said information transmission, discerning a failure evidencing one of an incomplete and an incorrect program element by reprocessing information received in said information transmission, and executing a predetermined secondary error correction routine in consequence of discerning a failure; and

(b) effects a receiver station to generate a program, said receiver station to perform a primary error correction routine by processing at least a portion of said information transmission, discerning a failure evidencing one of an incomplete and an incorrect program element by reprocessing information received in said information transmission, and executing a predetermined secondary error correction routine in consequence of discerning a failure.

Applicants respectfully request that the 35 U.S.C. §102(e) rejection of claim 24 be withdrawn.

Applicants further respectfully submit that the claims in the present application should be allowed because these methods are not disclosed, taught, suggested, or implied by the applied prior art. For a prior art reference to anticipate in terms of 35 U.S.C. §102, every element of the claimed invention must be identically shown in a single reference. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. Scripps Clinic & Research Foundation v. Genetech, Inc., 927 F.2d 1565, 18 U.S.P.Q.2d 1001, 18 U.S.P.Q.2d 1896 (Fed. Cir. 1991). Absence from a cited reference of any element of a claim negates anticipation of that claim by the reference. Kloster Speedsteel AB v Crucible, Inc., 230 U.S.P.Q. 81 (Fed. Cir. 1986), on rehearing, 231 U.S.P.Q. 160 (Fed. Cir. 1986).

D. Response to Rejection of Claims for Non-Obviousness

Claims 6 & 8 are rejected under 35 U.S.C. 103(a) as being rejected by DeLuca et al.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference to combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references combined) must teach or suggest all the claim recitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not based on Applicants' disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP 706.02(j).

With respect to Applicants' amended claim 6 & 8, DeLuca et al. fails to, *inter alia*, teach or suggest all the claim recitations, since DeLuca et al. fails to teach the subject

matter of independent claim 5, as responded to above, and therefore it would not have been obvious to use DeLuca et al. to obviate Applicants' claims 6 & 8.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claims 6 & 8 be withdrawn.

E. Response To Rejection Based On MPEP § 804 (II)(B)(2)

1. Introduction

As to the Office Action's rejection of Applicants' claim under a non-statutory non-obvious type of double patenting, Applicants strongly traverse the Examiner's double patenting rejection on three separate grounds which are set forth in the reply brief for Serial No. 08/113,329 (Atty. Docket No. 05634.008), incorporated herein by reference. For the sake of brevity, these arguments will not be set forth herein; the Examiner is respectfully directed to the above-mentioned reply brief.

As an initial matter, the Examiner's rejection of the present application under the Schneller double patenting theory based on Harvey U.S. Patents 4,694,490 and 4,704,725 is improper because the present application does not claim the benefit of those applications under 35 U.S.C. § 120. Thus, there could never have been a basis for claiming the present subject matter in those applications. Therefore, the rejection based on Harvey U.S. Patents 4,694,490 and 4,704,725 should be withdrawn.

Moreover, the PTO fails to specifically identify all claims from cited Harvey patents that cover specific claims in the present application. Rather, the Office Action references "representative claims" from patents and the present application. The Office Action does not cite specific elements from claims in a patent covering specific elements in claims in the application. In fact, the Office Action acknowledges that the patent claims and application claims are directed to different elements, but states that this "does not prohibit this rejection if there is common or interrelated subject matter

recited.” The Office Action then references Schneller in support of this erroneous statement, not supported by Schneller.

The claims in the present application are distinct from the claims in the Harvey patents. As previously mentioned, the Office Action states that the independent and distinct standard was the main factor in the Schneller court’s determination that the double patenting rejection should be affirmed. The Office Action has misinterpreted this phrase. This phrase means independent ‘or’ distinct. MPEP (6th ed.) § 802.01. The MPEP defines independent as meaning “that there is no disclosed relationship between the two or more subjects disclosed” and that they are not connected. The MPEP defines the term distinct as meaning that “two or more subjects disclosed are related . . . but are capable of separate manufacture, use, or sale as claimed” Two or more subjects cannot then be unrelated, independent, and also related, and thus distinct. Analyzing the PTO’s cited representative claims referenced in the Office Action, the claims of the present application are clearly distinct from the claims in the patents and therefore the claims in the present application are patentable. Although not required, Applicants will analyze the claims of the present application with respect to the designated representative claims of Harvey U.S. Patents 4,694,490 and 4,704,725.

2. Claim 24 of the present application is distinct from the first representative claim, claim 7 of U.S. Patent 4,694,490.

Patent 4,694,490, claim 7 claims a method of communicating television program material, said material including a video signal containing a television program and an instruct-to-overlay signal, to multiple receiver stations. The video signal is received and the instruct-to-overlay signal detected and processed by a computer. The computer generates and transmits its overlay video signals to a television receiver which presents a combined display of the television program and overlay video signals, said display being specific to a particular user.

Present application claim 24, as amended, relates to method of controlling a receiver station, comprising the steps of: receiving an information transmission; receiving an instruct signal; receiving a transmitter control signal; and transmitting said information transmission, said instruct signal and said transmitter control signal.

Patent claim 7 does not cover present application claim 24. Patent claim 7 relates to instruct-to-overlay signals that are processed by a computer and received by a television receiver which presents a combined display of the instruct-to-overlay signal and a television program. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,694,490, claim 7	Present application, claim 24 (as amended)
<p>In a method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay video signals, to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay video signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, and wherein a video signal containing a television program signal and an instruct to-overlay signal are transmitted to said receiver stations, the steps of:</p> <p>receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations</p> <p>detecting the presence of said</p>	<p>A method of controlling a receiver station, said receiver station including a receiver, a memory operatively connected to said receiver, and at least one processor operatively connected to said memory, comprising the steps of:</p> <p>receiving an information transmission to be transmitted;</p> <p>receiving an instruct signal which one of:</p> <p>(a) effects a transmission station to generate a program, said receiver station to perform a primary error correction routine by processing at least a portion of said information transmission, discerning a failure evidencing one of an incomplete and an incorrect program element by reprocessing information received in said information transmission, and executing a predetermined secondary error correction routine in consequence of discerning a failure; and</p> <p>(b) effects a receiver station to generate a program, said receiver station to perform a primary error correction routine by processing at least a portion of said information transmission, discerning a failure evidencing one of an</p>

instruct-to-overlay signal at said selected receiver stations at a time when the corresponding overlay is not being displayed, and coupling said instruct-to-overlay signal to the computers at said selected receiver stations, and

causing the computers at said selected receiver stations to generate and transmit their overlay video signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a combined display at the selected receiver stations consisting of the television program and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.

incomplete and an incorrect program element by reprocessing information received in said information transmission, and executing a predetermined secondary error correction routine in consequence of discerning a failure;

receiving a transmitter control signal which operates at said transmitter station to communicate said program to a transmitter; and

transmitting said information transmission, said instruct signal and said transmitter control signal.

3. Claim 24 of the present application is distinct from the second representative claim, claim 3 of U.S. Patent 4,704,725.

Patent 4,704,725, claim 3 claims a method of communicating output signals comprising data and user specific signals at a multiplicity of receiver stations from computers to output devices. At least some of the computers can modify the user specific signals by processing modification control signals. The computers communicate the data and user specific signals in response to a received and detected instruct-to-transmit signal.

Present application claim 24, as amended, relates to method of controlling a receiver station, comprising the steps of: receiving an information transmission; receiving an instruct signal; receiving a transmitter control signal; and transmitting said information transmission, said instruct signal and said transmitter control signal.

Patent claim 3 does not cover present application claim 24. Patent claim 3 relates to the communication of user specific signals. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,704,725, claim 3	Present application, claim 24 (as amended)
<p>A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of:</p> <p>transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device;</p> <p>detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and</p> <p>causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.</p>	<p>A method of controlling a receiver station, said receiver station including a receiver, a memory operatively connected to said receiver, and at least one processor operatively connected to said memory, comprising the steps of:</p> <p>receiving an information transmission to be transmitted;</p> <p>receiving an instruct signal which one of:</p> <p>(a) effects a transmission station to generate a program, said receiver station to perform a primary error correction routine by processing at least a portion of said information transmission, discerning a failure evidencing one of an incomplete and an incorrect program element by reprocessing information received in said information transmission, and executing a predetermined secondary error correction routine in consequence of discerning a failure; and</p> <p>(b) effects a receiver station to generate a program, said receiver station to perform a primary error correction routine by processing at least a portion of said information transmission, discerning a failure evidencing one of an incomplete and an incorrect program element by reprocessing information received in said information transmission, and executing a predetermined secondary error correction routine in consequence of discerning a failure;</p> <p>receiving a transmitter control signal which operates at said transmitter station to communicate said program to a transmitter; and</p> <p>transmitting said information transmission, said instruct signal and said transmitter control signal.</p>

4. Claim 24 of the present application is distinct from the third representative claim, claim 24 of U.S. Patent 4,965,825.

Patent 4,965,825, claim 24 claims a method of generating user specific output information at a multiplicity of receiver stations. Each receiver station is programmed with a special user application and has a computer adapted to generate user specific output information. Each receiver station has an output device to which its computer transmits a user specific signal. At a time when the user specific output information does not exist, an instruct-to-generate signal is transmitted to the receiver stations. In response to the instruct-to-generate signal, the computers generate and transmit to the output devices the user specific output information in user specific signals which are different, "with each output signal specific to a specific user".

Present application claim 24, as amended, relates to method of controlling a receiver station, comprising the steps of: receiving an information transmission; receiving an instruct signal; receiving a transmitter control signal; and transmitting said information transmission, said instruct signal and said transmitter control signal.

Patent claim 24 does not cover present application claim 24. Claim 24 relates to user specific signals sent from the receiver station to an output device. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,965,825, claim 24	Present application, claim 24 (as amended)
In a method of generating computer output at a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific output information content and user specific signals to one or more associated output devices, with at least one or more associated output devices, with at least some of said computers being programmed to process modification	A method of controlling a receiver station, said receiver station including a receiver, a memory operatively connected to said receiver, and at least one processor operatively connected to said memory, comprising the steps of: receiving an information transmission to be transmitted; receiving an instruct signal which one of:

control signals so as to modify said computers' method of processing data and generating output information content, each of said computers, being programmed to accommodate a special user application, the steps of:

transmitting an instruct-to-generate signal to said computers at a time when corresponding user specific output information content does not exist, and

causing said last named computers to generate their user specific output information content in response to said instruct-to-generate signal, thereby to transmit to each of their associated output devices an output information content and the user specific signal of its associated computer, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

(a) effects a transmission station to generate a program, said receiver station to perform a primary error correction routine by processing at least a portion of said information transmission, discerning a failure evidencing one of an incomplete and an incorrect program element by reprocessing information received in said information transmission, and executing a predetermined secondary error correction routine in consequence of discerning a failure; and

(b) effects a receiver station to generate a program, said receiver station to perform a primary error correction routine by processing at least a portion of said information transmission, discerning a failure evidencing one of an incomplete and an incorrect program element by reprocessing information received in said information transmission, and executing a predetermined secondary error correction routine in consequence of discerning a failure;

receiving a transmitter control signal which operates at said transmitter station to communicate said program to a transmitter; and

transmitting said information transmission, said instruct signal and said transmitter control signal.

5. Claim 24 of the present application is distinct from the fourth representative claim, claim 15 of U.S. Patent 5,109,414

Patent 5,109,414, claim 15 claims a signal processing system which receives data from a data source and outputs the data to a matrix switch and a detector, control signals are detected within the received data and stored for further processing, and a processor controls the directing functions of (1) the matrix switch which receives the data as input and can direct selected portions of the data to a data transmission means and (2) the device which stores and transfers the control signals to the processor.

Present application claim 24, as amended, relates to method of controlling a receiver station, comprising the steps of: receiving an information transmission; receiving an instruct signal; receiving a transmitter control signal; and transmitting said information transmission, said instruct signal and said transmitter control signal.

Patent claim 15 does not cover present application claim 24. Patent claim 15 relates to a data system that receives and processes data from a data source and includes a processor that controls the functions of a matrix switch and a storage device. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 5,109,414, claim 15	Present application, claim 24 (as amended)
<p>In a signal processing system, a receiver/distribution means for receiving data from a data source and for outputting said data to a matrix switch means and a control signal detector means, a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means, a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data, a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on instructions contained in said control signals.</p>	<p>A method of controlling a receiver station, said receiver station including a receiver, a memory operatively connected to said receiver, and at least one processor operatively connected to said memory, comprising the steps of: receiving an information transmission to be transmitted; receiving an instruct signal which one of: (a) effects a transmission station to generate a program, said receiver station to perform a primary error correction routine by processing at least a portion of said information transmission, discerning a failure evidencing one of an incomplete and an incorrect program element by reprocessing information received in said information transmission, and executing a predetermined secondary error correction routine in consequence of discerning a failure; and (b) effects a receiver station to generate a program, said receiver station to perform a primary error correction routine by processing at least a portion of said information transmission, discerning a failure evidencing one of an</p>

incomplete and an incorrect program element by reprocessing information received in said information transmission, and executing a predetermined secondary error correction routine in consequence of discerning a failure;

receiving a transmitter control signal which operates at said transmitter station to communicate said program to a transmitter; and

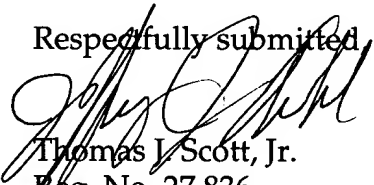
transmitting said information transmission, said instruct signal and said transmitter control signal.

III. CONCLUSION

In accordance with the foregoing it is respectfully submitted that all outstanding objections are rejections have been overcome and/or rendered moot. Further, that all pending claims patentably distinguish over the prior art, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for telephone interview to discuss resolution of such informalities.

Date: September 24, 1997
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Respectfully submitted,

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for